## **OBITUARY**

## BARBARA STODDARD BURKS

Born in New York City, Dec. 22nd, 1902 Died in New York City, May 25th, 1943

THE death of Barbara Burks has deprived the world of a rich personality and a brilliant scientist. Not only those who knew and worked with her, but countless others in all walks of life will continue to miss her. Her work on twins and foster children has thrown new light on the social problems underlying eugenics, and her technical research has opened up paths which other geneticists will follow.

Although she specialized in the application of mathematics to human genetic data, she never lost sight of the intangibles-emotional, social and economic—which underlie all studies of individuals or groups. Ever since her student days in the University of California she was interested in the experimental material on which eugenics is based. Her first important contribution dates back to 1928, when her well-known study of foster-children appeared. She did not deny the importance of environment, but she showed that heredity accounted for between 75 and 80 per cent. of I.Q. variance. This conclusion, although it has aroused much controversy, has never been seriously challenged, and it has influenced the policy of many American child-adoption organizations.

In 1930 the third volume of Terman's Genetic Studies of Genius was published, of which she was the principal author. Her conviction of the importance of inborn traits was matched by her impatience with social abuses which deny full development to the under-privileged:

"That the (gifted) victims of such unfavourable circumstances carry on bravely and hopefully does not make the spectacle any less touching to the sympathetic observer. In a majority of cases . . . the fight will be won, though sometimes at heavy cost. . . . In other cases the obstacles may prove too great. . . . The theory that 'genius will out' . . . is just nonsense. In

any community . . . one can find genius that is being starved or warped or killed by influences that are too powerful or too insidious to be combated successfully."

In 1937, while working as Research Associate at the Eugenics Record Office,\* she succeeded in beginning a linkage map of human traits, by estimating the rate of crossing over of two single genes. She devised means for testing linkage on sibling pairs without the need of using a pedigree of more than one generation. She also began a study of occupational fertility in relation to education which was nearing completion at the time of her tragic death.

The most enduring of her many interests was the study of identical twins, for she, like Galton, recognized this as the field, par excellence, for disentangling human nature and nurture. One of her earliest publications dealt with determining the identity of twins. Later she found a pair of twin girls, brought up in different surroundings, whom she was able to observe for six years. She found that while ability and temperament depended mainly on heredity, social adjustment was largely determined by environment. At the time of her death, Dr. Burks was observing three other pairs of identical twins reared apart, a study for which she had just been awarded a Guggenheim Fellowship. hoped that this study, and another important research on foster children on which she had worked for two years, will be completed by other workers.

Barbara Burks was in England when the war broke out, and she felt its implications from the start far more keenly than many of her fellow-Americans. During the first nine months of "phoney war" she would occasionally harangue well-meaning isolationists with an eloquence that often changed their

<sup>\*</sup> Carnegie Institution, Cold Spring Harbor, N.Y., U.S.A.

thinking. She was made Chairman of the American Psychological Association's Committee on Displaced Foreign Psychologists, and laboured tirelessly to help her refugee colleagues. Often she worked late into the night at endless correspondence with university faculties all over the United States. Her friends are now starting a Memorial Fund to promote professional relations between geneticists and psychologists in different countries. The first practical plan is to establish a loan fund to assist European scholars who are conducting research in the United States.

Hers was a lovable and exuberant nature. Whether at her desk, bending in calm concentration over huge data sheets, or on field trips, chatting with "her" twins, or at home, romping on the floor with her Siamese kittens, or serving delectable fruit drinks to her friends' children, she showed an ebullient vitality which it is hard to believe is now ended. She thought deeply about the problems of individuals and of society, and the tools which she fashioned will help other workers to press the battle against ignorance.

Barbara S. Bosanquet.

## J. H. CURLE

The late Mr. J. H. Curle, who had long been a member of the *Eugenics Society* and who has left it £2,000 in his will, was a remarkable man in more than one respect.

He was probably the greatest traveller, as apart from explorer, the world has ever known, and for many years on end averaged about 50,000 miles annually into every portion of the globe. He always carried with him an enormous map on which his travels were faithfully traced and at the time of his death the total mileage marked on it was about 1,850,000. Some of his journeys were outstanding: a thousand miles by sledge in Siberia, right through Africa from Cape Town to Algiers, right across Australia from south to north. But there was practically nowhere, however remote or inaccessible, he had not been, in many cases frequently, and he would gladly face both discomfort and

danger in order to visit a new land or witness a striking scene.

This urge to travel, which had been Mr. Curle's dominant passion for fifty years, was doubtless an outlet for his romanticism—a trait which, in the ordinary affairs of life, he subordinated to a hard-headed logic. For he was essentially a shy man and, though eminently sociable, reticent about his deepest convictions and only to be approached closely by those with sympathy and understanding. He often concealed his warmest feelings under an air of critical aloofness and he had, in fact, such a dread of any display of emotion that, though he valued appreciation, he would usually turn aside with a joke or a quaint remark any expression of it. In this, as in his loyalty to his relations and friends, he was very much of a Border Scot.

His capacity for enduring hardships and for fulfilling the tasks he set himself was all the more noteworthy in that, though a man of big frame (he stood 6 ft. 3 in. in his socks), he was not, strictly speaking, robust. As a boy he had suffered from a nervous affection which necessitated his leaving school and being sent for a voyage to Australia in a sailing ship, and he never completely outlived this weakness. But he had an indomitable will and he allowed nothing to stay him from his purpose.

He was a man of strong individuality and equally strong views, and he recorded his travels and opinions in a series of books written in vigorous English and enlivened by great experience and a rich humour. Like all people of decided character he had his prejudices, but behind everything there was a native common sense and a Scottish caution which enabled him to form judgments characterized, in many instances, by their balance and foresight. The list of his books, all of which are still in print, is as follows: The Shadow Show, This World of Ours, To-day and To-morrow, This World First, Travels and Men, The Face of the Earth, and Eskimo Pie. He also wrote technical works on subjects as far apart as gold mining and Transvaal stamps.

With regard to these technical writings, it may be mentioned that he laid the founda-